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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,351	01/15/2002	David D. Goodman	112152.125	9860
24395	7590	01/10/2005	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP THE WILLARD OFFICE BUILDING 1455 PENNSYLVANIA AVE, NW WASHINGTON, DC 20004			SINGH, RAMNANDAN P	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/053,351

Applicant(s)

GOODMAN, DAVID D.

Examiner

Ramnandan Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 19-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 19-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>January 15, 2002</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**Preliminary Amendment/ Supplementary Preliminary Amendment**

1. Preliminary amendment filed on January 15, 2002 and Supplementary Preliminary Amendment filed on September 16, 2002 are approved.

**2. Status of Claims**

Claims 1, 33, 39 and 50 are amended.

Claims 2-18 are cancelled.

New claims 51-56 are added.

Claims 1, 19-73 are pending.

***Claim Objections***

3. Claims 19 and 38 are objected to because of the following informalities:

Claim 19 recites "the system of claim 18" in line 1. This is incorrect.

Change "claim 18" to ":claim 1".

Claim 38 recites "The system of claim 7" in line. This is incorrect.

Change "claim 7" to "claim 36".

Appropriate correction is required.

### ***Double Patenting***

#### 4. Analysis-I

Claim 48 of the instant application no. 10/053351 on page 19, lines 1-13 are **identical** to claim 7 of U.S. Patent Number 6,192,399 B1 to Goodman in col. 33, lines 33-56.

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#### Claim 48 of the instant Application:

A device for connecting to a twisted pair wiring block having a plurality of corresponding pairs of contacts, wherein said wiring block is configured to accept a connector between the pairs of contacts such that in the absence of an inserted connector, each pair of contacts are directly electrically coupled, said device comprising:

a first connector for insertion between the pairs of contacts, including contacts for mating with a first contact and a second contact of each of the pairs of contacts;

a second connector providing a plurality of contacts, each of said contacts corresponding to a different one of the pairs of contacts of the wiring block;

circuitry for providing a signal path in a first band of frequencies between the first contact and the second contact of each of the pairs of contacts of the wiring block;

circuitry for providing a signal path in a second band of frequencies higher than the frequencies of the first band of frequencies between the

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each of the contacts on the second connector and the first contact of the corresponding pair of contacts on the wiring block.

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Claim 7 of U.S. Patent no. 6,192,399 B1:

A device for connecting to a twisted pair wiring block having a plurality of corresponding pairs of contacts, wherein said wiring block is configured to accept a connector between the pairs of contacts such that in the absence of an inserted connector, each pair of contacts are directly electrically coupled, said device comprising:

a first connector for insertion between the pairs of contacts, including contacts for mating with a first contact and a second contact of each of the pairs of contacts;

a second connector providing a plurality of contacts, each of said contacts corresponding to a different one of the pairs of contacts of the wiring block;

circuitry for providing a signal path in a first band of frequencies between the first contact and the second contact of each of the pairs of contacts of the wiring block;

circuitry for providing a signal path in a second band of frequencies higher than the frequencies of the first band of frequencies between the each of the contacts on the second connector and the first contact of the corresponding pair of contacts on the wiring block.

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467,

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114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claim 48 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 7 of prior U.S. Patent No. 6,192,399 B1. Since claims 49-50 are dependent on claim 48, they are also rejected. This is a double patenting rejection.

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7. Analysis-II:

To demonstrate that the remaining claims of the instant application no. 10/053 351 and US Patent No. 6,192,399 are claiming common matter, a brief comparative analysis is presented below:

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Claim 1 of the instant application:

A communication system for passing communication between a plurality of terminal devices, including telephones and computers, and a plurality of information services, including a telephone network and a data network, comprising:

a twisted pair wiring network coupled to the terminal devices including a plurality of separate twisted pair wiring networks for passing voice signals in a telephone voice frequency band between the telephone network and the one or more telephones on each of said separate twisted pair wiring

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networks, wherein each separate twisted pair wiring network includes a two-conductor network; and

circuitry for combining telephone and data signals including

a first data hub coupled to the data network and including a plurality of data ports each associated with a different one of the separate twisted pair wiring networks, wherein the first data hub includes circuitry for inhibiting transmission of data received from the data network and addressed to a computer coupled to one of the data ports from being transmitted on other of the data ports, and

for each of the data ports, circuitry coupled to the telephone network and to said data port, coupled to the separate twisted pair wiring network associated with said data port, and configured to combine on said separate twisted pair wiring network (a) telephone voice signals in the telephone voice frequency band passing between the telephone network and the one or more telephones on said separate network, and (b) high frequency signals in a high band of frequencies higher than those of the telephone voice frequency band passing information between said data port and one or more of the computers coupled to said separate twisted pair wiring network,

wherein each separate twisted pair wiring network includes a two-conductor wiring network and circuitry coupled to the telephone network and to said port further includes a first media adapter including circuitry for communicating with the first data hub over more than two conductors and for communicating with the one or more computers on said separate twisted pair wiring network over the two-conductor network.

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Claim 1 of U.S. Patent No. 6,192,399B1:

A communication system for passing communication between a plurality of terminal devices, including telephones and computers, and a plurality of information services, including a telephone network and a data network, comprising:

a twisted pair wiring network coupled to the terminal devices including a plurality of separate twisted pair wiring networks for passing voice signals in a telephone voice frequency band between the telephone network and the one or more telephones on each of said separate twisted pair wiring networks, wherein each separate twisted pair wiring network includes a two-conductor network; and

circuitry for combining telephone and data signals including

a first data hub coupled to the data network and including a plurality of data ports each associated with a different one of the separate twisted pair wiring networks, wherein the first data hub includes circuitry for inhibiting transmission of data received from the data network and addressed to a computer coupled to one of the data ports from being transmitted on other of the data ports, and

for each of the data ports, circuitry coupled to the telephone network and to said data port, coupled to the separate twisted pair wiring network associated with said data port, and configured to combine on said separate twisted pair wiring network (a) telephone voice signals in the telephone voice frequency band passing between the telephone network and the one or more telephones on said separate network, and (b) high frequency signals in a high band of frequencies higher than those of the telephone voice frequency band passing information between said data port and one or more of the computers coupled to said separate twisted pair wiring network,

wherein the circuitry coupled to the telephone network and to said data port further includes a first media adapter including circuitry for communicating with the first data hub over more than two conductors and for communicating with the one or more computers on said separate twisted pair wiring network over the two-conductor network and configured to communicate with the first data hub using Ethernet signals over four conductors, and wherein the first media adapter further includes circuitry coupled to the two-conductor network for transmitting a first control signal in a first frequency band to indicate that it is transmitting data onto the two-



conductor network in the high band of frequencies and for detecting a second control signal in a second frequency band while transmitting said first control signal, said second control signal indicative of another device transmitting data onto the two-conductor network in the high band of frequencies, whereby the signals in the first and second frequency band provide information for detecting data collisions on the two-conductor network.

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From the comparison of the above two claims, it is clear that claim 1 of the instant application is broad version of claim of U.S. Patent No. 6,192,399B1. As such, the instant application and U.S. Patent No. 6,192,399B1 are claiming common matter.

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or

patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1, 19-42, 51-63 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U. S. Patent No. US 6,192,399 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-2 of U. S. Patent No. US 6,192,399 B1 encompass the limitations of claims 1, 19-42, 51-63 of the instant application. Similarly, claims 3-6 of U. S. Patent No. US 6,192,399 B1 encompass the limitations of claims 43-47 of the instant application, and therefore, claims 43-47 are also rejected. In re Karlson, 163 USPQ (CCPA, 1963). Also note Ex parte Rainu, 168 USPQ 375 (Bd. Appl. 1969).

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 64, 65, 66, 68 are rejected under 35 U.S.C. 102(e) as being anticipated by Doyle [US 5,856,980].

Regarding claim 64, Doyle teaches a twisted pair communication system shown in Fig. 2, wherein

a junction (i.e. **first hub 265A**) directing signal flow along three or more conductive path [see Fig. 7];

each conductive path consists of two twisted pairs to couple their communication nodes [Figs. 2-8; col. 6, lines 52-63];

signals flow towards the junction along one of the twisted pairs of each conductive path and signal flow away from the junction along the second twisted pair of the same conductive path [Fig. 2];

the junction includes a signal splitter **(92)** connected to the twisted pair over which the signal flows towards the junction [col. 7, line 52 to col. 8, line 65] and a signal combiner **(128)** connected to the opposite twisted pair [col. 11, line 59 to col. 12, line 16];

part of the energy of the signals flowing towards each signal splitter is directed towards each of the signal combiners that are connected to different conductive paths;

most of the signal energy arriving at each signal combiner is directed onto twisted pair over which signals flow away from the combiner; and all of the signal splitters and the signal combiners function without any external power (i.e. passive splitters and combiners) [Figs. 2-8; col. 12, line 65 to col.13, line 65].

Regarding claim 65, Doyle further teaches a splitter(192)/combiner(190) for each of conductive paths [Figs. 6-8].

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Regarding claim 66, Doyle further teaches devices communicating using the half-duplex 10BaseT Ethernet standard [Fig. 5; col. 12, lines 31-54; col. 14, line 29 to col. 15, line 27; col. 6, line 64 to col. 7, line 6; col. 7, lines 23-40; col. 10, lines 45-54].

Claim 68 is essentially similar to claim 66 and is rejected for the reasons stated above.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 67, 69, 70, 71-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle as applied to claims 64, 66, 68 above, and further in view of Cook [US 5,623,543].

Regarding claim 67, Doyle teaches the system wherein a junction is

employed for directing signals that flow along three or more conductive paths, and a combiner/splitter is used to provide high/low frequency signals.

Doyle does not teach expressly employing high-pass/low-pass filters for realizing the combiner/splitter systems. However, a telephone/data splitter/combiner filter can be implemented using a high-pass/low-pass filter which is well-known in the art.

Cook teaches filtering arrangements comprising arrangements of high-pass/low-pass filters for use with twisted pair telephone lines, as shown in Fig. 3, wherein the high-pass filter blocks signals below the highest frequency used for ordinary telephone communication and the low-pass filter blocks signals at frequencies above the telephone voice band [col. 2, lines 28-51; col. 3, lines 13-65; Abstract]. It is nevertheless a teaching to one of ordinary skill in the art to apply this with Doyle.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the arrangements of high-pass/low-

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pass filters of Cook to Doyle in order to separate ADSL/POTS signals

[Cook; col. 1, lines 16-27].

Claims 69, 70, 71, 73, 75 are essentially similar to claim 67 and are rejected for the reasons stated above.

Regarding claim 72, see Figs. 7-8 of Doyle.

Claims 74 and 76 are essentially similar to claim 72 and are rejected for the reasons stated above.

### ***Allowable Subject Matter***

14. Claims 1, 43, and 48 would be allowable if rewritten or amended to overcome the rejection(s) under double patenting, set forth in this Office action.

15. Claims 19-42 and 51-63 being dependent from claim 1, claims 44-47 being dependent from claim 43, and claims 49-50 being dependent from claim 48 also stand rejected.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(i) Bell [US 5,930,340] teaches a device for isolating voice and data signals on a common carrier [Figs. 1-4].

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (703)308-6270. The examiner can normally be reached on M-F(8:00-4:30).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester Isen can be reached on (703)-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramnandan Singh  
Examiner  
Art Unit 2644



**FORESTER W. ISEN**  
**SUPERVISORY PATENT EXAMINER**